National Center for Pediatric Practice Based Research and Learning

Principal Investigator: Wasserman, Richard

Organization: American Academy of Pediatrics

Mechanism: RFA: HS-12-002: Research Centers in Primary Care Practice Based

Research and Learning

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AHRQ Funding Amount: \$599,924

Summary: Practice-based research is needed to develop evidence-based practices that promote optimal child health outcomes. Practice-based research networks (PBRNs) are positioned to conduct high-quality research leading to evidence-based practices, but often face many challenges, including maintaining supportive research and administrative infrastructure; coordinating membership large enough to support sample sizes for rigorous research; and sustaining continuous funding and experienced researchers.

To address these challenges, this project established the Center for Pediatric Practice-Based Research and Learning (C-PRL). The C-PRL consists of two existing pediatric PBRNs and a quality improvement network—the Pediatric Research in Office Settings (PROS), a national PBRN of the American Academy of Pediatrics (AAP) that includes 712 pediatric practices in all 50 States, the District of Columbia, the Commonwealth of Puerto Rico, and Canada; and the Pediatric Research Consortium (PeRC) of the Children's Hospital of Philadelphia (CHOP), which consists of 29 regional pediatric practices. The second existing PBRN is the Practice Improvement Network (PIN), a national pediatric practice quality improvement network based at the AAP.

C-PRL, led by Director Dr. Richard Wasserman, will be a central resource for primary care child health research, dissemination, and implementation. PROS will serve as C-PRL's administrative core, PeRC as the research core, and PIN will provide quality improvement expertise. The CPR-L will support the coordination of research activities and research opportunities among the PBRNs. A steering committee will provide governance and oversight of all activities, set research and funding priorities, and allocate infrastructure resources. A rapid-response planning team will be convened to vet research opportunities and respond to relevant funding opportunity announcements.

C-PRL will use existing electronic health record (EHR)-based information systems in PROS and PeRC for planning research projects and for collecting research data. All practices within PeRC use a single-vendor EHR system to support research activities. PROS health information technology infrastructure, known as ePROS, is a federated database that links the various vendor systems used by some practice members of PROS. Although only a small proportion of PROS practices are part of ePROS (31 practices in 20 States), efforts are underway to expand this sub-network. Once fully implemented, it is expected that ePROS will represent 160 pediatricians and more than 300,000 pediatric patients.

In addition to knowledge creation, C-PRL will widely disseminate the research findings and evidence-based practices that result from its activities. C-PRL will capitalize on the existing dissemination mechanisms

within the two PBRNs to promote implementation of evidence-based pediatric care.

Specific Aims:

- Link two pediatric PBRNs: 1) the national network, Pediatric Research in Office Settings (PROS) of the American Academy of Pediatrics (AAP), the nation's largest and second-oldest pediatric PBRN (enhanced by its affiliation with the AAP's Quality Improvement Innovation Network (QuIIN) and the newly developed ePROS subnetwork for EHR data collection); with 2) the Children's Hospital of Philadelphia's (CHOP's) Pediatric Research Consortium (PeRC)—arguably the nation's most innovative pediatric PBRN—to form the Center For Pediatric Practice-Based Research and Learning (C-PRL). (Ongoing)
- Enhance established, and create new, working relationships between PROS/AAP and PeRC/CHOP in the C-PRL. (Ongoing)
- Leverage the dissemination and implementation capacities of PROS and PeRC and their parent organizations to improve delivery of pediatric primary care at local, regional, and national levels through the C-PRL. (Ongoing)

2012 Activities: Dr. Wasserman and his team successfully linked three different networks—PROS, PIN, and PeRC. A PROS Rapid Response Listserv was created and used numerous times during the project period. The Rapid Response Listserv includes 16 leaders and staffers from all three networks as well as 25 practicing PROS practitioners. The Listserv was used specifically to get feedback regarding C-PRL to obtain practitioner input on two AHRQ rapid response opportunities. For the first, in response to AHRQ's Funding Opportunity Announcement for Practice-Based Research to Improve Self-Management Support, a decision was made not to apply. For the second, Listserv input informed a decision to apply to AHRQ's Funding Opportunity Announcement for Applications to Provide Policy Relevant Evaluations to Inform Development of Health Information Technology Meaningful Use Objectives.

PeRC leaders attended the PROS Steering Committee meeting in October 2012 and both PeRC and PIN/QuINN leadership plan to attend the PROS Steering Committee Meeting in April 2013. Steps to integrate ePROS and PeRC EHR data have begun. Further collaboration between PROS and PIN/QuINN, particularly those involving electronic data collection, was discussed. PROS has committed to share strategies for electronic data collection with QuINN. Dr. Wasserman has periodically joined QuINN weekly leadership conference calls, which are also attended by practitioner members of the PROS Steering Committee. An official PIN/QuINN liaison to the PROS Steering Committee was approved, which means that a QuINN leader will be present at PROS Steering Committee Meetings in October 2013 and thereafter. Links between PROS, ePROS, and PeRC have been strengthened over the project year.

Relationships between PROS/AAP and PeRC/CHOP are being built as the two networks continue to work closely on the established ePROS studies and began collaborating on the recently funded Comparative Effectiveness Research through Collaborative Electronic Reporting (CER2) study, which will create a fully elaborated system to employ clinical data in EHRs for conducting comparative effectiveness research on pediatric drug therapeutics. PROS and PeRC are in the process of developing common metrics and approaches that are being applied to ongoing research questions. Infrastructure enhancements have occurred with a PeRC liaison approved to serve on the PROS Steering Committee. Since PROS has a program to groom pediatricians to be more effective leaders of research in their practices, the network is committed helping PeRC implement a similar strategy.

RESEARCH CENTERS IN PRIMARY CARE PRACTICE BASED RESEARCH AND LEARNING

Preliminary Impact and Findings: This project has no findings to date.

Target Population: Pediatric*

Strategic Goal: Develop and disseminate health IT evidence and evidence-based tools to improve health care decisionmaking through the use of integrated data and knowledge management.

Business Goal: Knowledge Creation

^{*}This target population is one of AHRQ's priority populations.